

WHAT IS CLAIMED IS:

1. A printing apparatus comprising:

reception means for receiving information to be printed and a first printing parameter;

5 determination means for employing said information that is received to determine a second parameter suitable for said information;

setup means for setting up said first and said second parameters; and

10 printing means for printing said information based on said first and said second printing parameters set up by said setup means.

2. A printing apparatus according to claim 1,

15 wherein said determination means determines a printing parameter type that is not received by said reception means.

3. A printing apparatus according to claim 1,

20 wherein said determination means specifies another value instead of said printing parameter received by said reception means.

4. A printing apparatus according to claim 1,

25 further comprising simulation means for simulating the printing results, wherein said determination means specifies a printing parameter based on the results

obtained by said simulation.

5. A printing apparatus according to claim 1,
further comprising scheduling means for making a
5 printing schedule, wherein said determination means
determines a printing parameter according to said
printing schedule prepared by said scheduling means.

6. A printing apparatus according to claim 1,
10 further comprising status identification means for
identifying a status of said printing means, wherein
said determination means specifies a printing parameter
in consonance with said status of said printing means
identified by said status identification means.

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7. A printing apparatus according to claim 1,
wherein said status identification means identifies
statues of a plurality of printing means and selects
one of said printing means based on the results of
20 identification.

8. A printing apparatus according to claim 1,
further comprising interpretation means for
disambiguating a printing request that is received by
25 said reception means and is ambiguously described,
wherein said determination means specifies a printing
parameter based on the results of the disambiguation

effected by said interpretation means.

9. A printing apparatus according to claim 1,
further comprising extraction means for extracting a
5 printing parameter from said information to be printed.

10. A printing apparatus comprising:
reception means for receiving information to be
printed;
10 identification means for identifying a user for
said information that is received;
printing means for printing said information;
printing results storage means having a plurality
of storage locations; and
15 control means for storing, at a different location
in said printing results storage means, printing
results obtained by said printing means for each user
who is identified by said identification means.

20 11. A printing apparatus according to claim 10,
further comprising display means for displaying for
each user whether or not there are printing results
available.

25 12. A printing apparatus according to claim 10,
further comprising display means for displaying, for
each storage location, whether or not there are

printing results available.

13. A printing apparatus according to claim 10,
further comprising display means for displaying a user
5 concerning said printing results.

14. An information processing apparatus
comprising:
communication means for communicating with an
10 external device;
output means for outputting information; and
control means for requesting information from said
external device, for receiving said information from
said external device, and for permitting said output
15 device to output said information.

15. An information processing apparatus according
to claim 14, further comprising input means for
receiving an output request from a user, wherein, in
20 response to the receipt of said output request, said
control means requests information for said external
device.

16. An information processing apparatus according
25 to claim 14, further comprising determination means for
specifying a status, wherein said control means
requests information to said external device based on

results obtained by said determination means.

17. An information processing apparatus comprising:

5 communication means for communicating with an external device;

 input means for receiving information;

 processing means for processing said information received by said input means; and

10 control means for transmitting said information through said communication means to said external device and requesting said external device to process said information.

15 18. An information processing apparatus according to claim 17, further comprising determination means for specifying a status, wherein, based on the results obtained by said determination means, said control means transmits information to said external device and
20 requests said information be processed.

 19. An information processing apparatus according to claim 17, wherein said control means requests a transfer of said information as a part of the
25 processing for said information.

 20. An information processing apparatus

comprising:

output means for outputting information;

acceptance means for accepting an output
instruction, including designation information included
5 for the designation of an output device;

detection means for detecting an apparatus that is
identified in said designation information;

output control means for permitting said output
means to execute said output instruction when said
10 apparatus detected by said detection means is said
information processing apparatus, and for transmitting
said output instruction to an external device when said
apparatus detected by said detection means is other
than said information processing apparatus.

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21. An information processing apparatus according
to claim 20, wherein said output means prints said
information.

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22. An information processing apparatus according
to claim 20, wherein said output means displays said
information.

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23. An information processing apparatus
comprising:

communication means for communicating with an
external device;

processing means for processing information;

management means for receiving from said external
device through said communication means information to
be processed and for managing said information by
5 employing a plurality of management states, including a
process pending state and a process wait state; and

control means for permitting said processing means
to process said information.

10 24. An information processing apparatus according
to claim 23, wherein said plurality of management
statuses include a processed status;

25. An information processing apparatus according
15 to claim 23, further comprising:

determination means for ascertaining whether said
information that is received is to be performed
immediately, and

decision means for specifying a management status
20 for said information based on the results obtained by
said determination means.

26. An information processing apparatus according
to claim 23, further comprising:

25 examination means for examining an execution
condition of said information in said pending state;
and

alteration means for altering, according to the results obtained by said examination means, said management status of said information, for which said execution condition is established, to said process
5 wait state.

27. An information processing apparatus according to claim 23, further comprising:

setup means for setting priorities for said
10 information in said processing wait state, wherein said control means performs a process for information, among information in said processing wait state, that has a higher priority.

15 28. An information processing apparatus according to claim 23, further comprising:

alteration means for changing said management status for information in said processing wait state to a processed status.
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29. An information processing apparatus according to claim 23, wherein said processing means is capable of performing a deletion, a search, an output or an alteration process for information that is to be
25 processed.

30. An information processing apparatus according

to claim 29, wherein said output processing includes the display, printing or transmission of data.

31. An information processing apparatus according to claim 29, wherein said alteration process includes alteration of either an execution condition, a main processing device, or a priority.

32. An information processing apparatus according to claim 23, wherein an execution condition is added to said information to be processed.

33. An information processing apparatus according to claim 23, wherein said execution condition includes an instruction by a user, an expiration period for processing, or a status of another device.

34. An information processing apparatus comprising:

20 reception means for receiving a process to be performed by another device;

processing means for performing a predetermined process required for the performance of said process received by said reception means; and

25 output means for outputting the results obtained by said processing means.

35. An information processing apparatus according to claim 34, wherein said output means outputs to said device said processing results.

5 36. An information processing apparatus according to claim 34, wherein said predetermined process is a pre-process for said process that is received.

10 37. An information processing apparatus according to claim 34, wherein said pre-process is the acquisition of a target for said process that is received.

15 38. An information processing apparatus according to claim 34, wherein said pre-process constitutes conversion of a format of a target for said process that is received.

20 39. An information processing apparatus comprising:

reception means for receiving designation information that identifies a target to be processed;

25 acquisition means for acquiring said target identified in said designation information received by said reception means;

processing means for performing a process for said target acquired by said acquisition means; and

output means for outputting the results obtained
by said processing means.

40. An information processing apparatus according
5 to claim 39, wherein said acquisition means searches
for information in said apparatus and acquires said
target.

41. An information processing apparatus according
10 to claim 39, wherein said acquisition means acquires
said target from another device.

42. An information processing apparatus
comprising:
15 reception means for receiving information to be
processed;
processing means for processing said information;
and
conversion control means for controlling a
20 conversion of said information that is received by said
reception means into information, described using a
description language, that is to be processed by said
processing means.

25 43. An information processing apparatus according
to claim 42, further comprising conversion means,
wherein said conversion control means permits said

conversion means to perform conversion.

44. An information processing apparatus according
to claim 42, wherein said conversion control means
5 requests that an external device perform conversion.

45. An information processing apparatus according
to claim 44, wherein an object for said conversion is
information described in a language inherent to a
10 specific application or to an output device.

46. An information processing apparatus according
to claim 42, wherein said information that is received
as an object for conversion is either a text document,
15 an image format, a specific printer description
language, or a document description language.

47. A printing method comprising:
a reception step of receiving information to be
20 printed and a first printing parameter;
a determination step of employing said information
that is received to determine a second parameter
suitable for said information;
a setup step of setting up said first and said
25 second parameters; and
a printing step of printing said information based
on said first and said second printing parameters set

up at said setup step.

48. A printing method according to claim 47,
wherein a printing parameter type that is not received
5 at said reception step is determined at said
determination step.

49. A printing method according to claim 47,
wherein another value instead of said printing
10 parameter received at said reception step is specified
at said determination step.

50. A printing method according to claim 47,
further comprising a simulation step of simulating the
15 printing results, wherein a printing parameter is
specified at said determination step based on the
results obtained by said simulation.

51. A printing method according to claim 47,
20 further comprising a scheduling step of making a
printing schedule, wherein at said determination step a
printing parameter is determined according to said
printing schedule prepared at said scheduling step.

25 52. A printing method according to claim 47,
further comprising a status identification step of
identifying a status of a printing unit, wherein at

said determination step a printing parameter is specified in consonance with said status at said printing unit identified at said status identification step.

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53. A printing method according to claim 47, wherein at said status identification step statues of a plurality of printing units are specified and one of said printing units is selected based on the results of identification.

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54. A printing method according to claim 47, further comprising an interpretation step of disambiguating a printing request that is received at said reception step and is ambiguously described, wherein at said determination step a printing parameter is specified based on the results of the disambiguation effected at said interpretation step.

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55. A printing method according to claim 47 further comprising an extraction step of extracting a printing parameter from said information to be printed.

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56. A printing method comprising:
a reception step of receiving information to be printed;
an identification step of identifying a user for

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said information that is received;

a printing step of printing said information;

a printing results storage step of storing
printing results in one of a plurality of storage
5 locations; and

a control step of storing printing results at a
different location for each user who is identified at
said identification step.

10 57. A printing method according to claim 56,
further comprising a display step of displaying for
each user whether or not there are printing results
available.

15 58. A printing method according to claim 56,
further comprising a display step of displaying, for
each storage location, whether or not there are
printing results available.

20 59. A printing method according to claim 56,
further comprising a display step of displaying a user
concerning said printing results.

25 60. An information processing method comprising:
a communication step of communicating with an
external device;

an output step of outputting information; and

a control step of requesting information from said external device, of receiving said information from said external device, and of permitting said output device to output said information.

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61. An information processing method according to claim 60, further comprising an input step of receiving an output request from a user, wherein, at said control step, in response to the receipt of said output request, information is requested for said external device.

62. An information processing method according to claim 60, further comprising a determination step of specifying a status, wherein, at said control step, information is requested to said external device based on results obtained at said determination means.

63. An information processing method comprising:
a communication step of communicating with an external device;
an input step of receiving information;
a processing step of processing said information received at said input step; and
a control step of transmitting said information to said external device at said communication step and of requesting said external device to process said

information.

64. An information processing method according to claim 63, further comprising a determination step of specifying a status, wherein, at said control step, based on the results obtained at said determination step, information is transmitted to said external device and said information is requested to be processed.

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65. An information processing method according to claim 63, wherein at said control step a transfer of said information is requested as a part of the processing for said information.

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66. An information processing method comprising:
an output step of outputting information;
an acceptance step of accepting an output instruction, including designation information included for the designation of an output device;

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a detection step of detecting an apparatus that is identified in said designation information;

an output control step of permitting said output means to execute said output instruction when said apparatus detected at said detection step is a locally own information processing apparatus, and of transmitting said output instruction to an external

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device when said apparatus detected at said detection step is other than said information processing apparatus.

5 67. An information processing method according to claim 66, wherein said information is printed at said output step.

10 68. An information processing method according to claim 66, wherein said information is displayed at said output step.

15 69. An information processing method comprising:
a processing step of processing information;
a management step of receiving information to be
processed from said external device through a
communication unit for communicating with said external
device, and of managing said information by employing a
plurality of management states, including a process
20 pending state and a process wait state; and
a control step of permitting said processing means
to process said information.

25 70. An information processing method according to claim 69, wherein said plurality of management statuses include a processed status;

71. An information processing method according to claim 69, further comprising:

a determination step of ascertaining whether said information that is received is to be performed

5 immediately; and

a decision step of specifying a management status for said information based on the results obtained at said determination step.

10 72. An information processing method according to claim 69, further comprising:

an examination step of examining an execution condition of said information in said pending state; and

15 an alteration step of altering, according to the results obtained at said examination step, said management status of said information, for which said execution condition is established, to said processing wait state.

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73. An information processing method according to claim 69, further comprising:

a setup step of setting priorities for said information in said processing wait state, wherein a process for information, among information in said
25 processing wait state, that has a higher priority is performed at said control step.

74. An information processing method according to claim 69, further comprising: an alteration step of changing said management status for information in said processing wait state to a processed status.

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75. An information processing method according to claim 69, wherein at said processing step, it is possible to perform a deletion, a search, an output or an alteration process for information that is to be processed.

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76. An information processing method according to claim 75, wherein said output processing includes display, printing or transmission of data.

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77. An information processing method according to claim 75, wherein said alteration process includes alteration of either an execution condition, a main processing device, or a priority.

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78. An information processing method according to claim 69, wherein an execution condition is added to said information to be processed.

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79. An information processing method according to claim 69, wherein said execution condition includes either an instruction by a user, an expiration period

for processing, or a status of another device.

80. An information processing method comprising:
a reception step of receiving a process to be
5 performed by another device;

a processing step of performing a predetermined
process required for the performance of said process
received at said reception step; and

an output step of outputting the results obtained
10 at said processing step.

81. An information processing method according to
claim 80, wherein said results of processing to said
device is output at said output step.

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82. An information processing method according
to claim 80, wherein said predetermined process is a
pre-process for said process that is received.

20 83. An information processing method according
to claim 82, wherein said pre-process is the
acquisition of a target for said process that is
received.

25 84. An information processing method according
to claim 82, wherein said pre-process constitutes a
conversion of a format of a target for said process

that is received.

85. An information processing method comprising:
a reception step of receiving designation
5 information that identifies a target to be processed;
an acquisition step of acquiring said target
identified in said designation information received at
said reception step;
a processing step of performing a process for said
10 target acquired at said acquisition step; and
an output step of outputting the results obtained
at said processing step.

86. An information processing method according
15 to claim 85, wherein at said acquisition step,
information is searched for in a locally own apparatus
and said target is acquired.

87. An information processing method according
20 to claim 85, wherein, at said acquisition step, said
target is acquired from another device.

88. An information processing method comprising:
a reception step of receiving information to be
25 processed;
a processing step of processing said information;
and

a conversion control step of controlling a
conversion of said information that is received at said
reception step into information, described using a
description language, that is to be processed at said
5 processing step.

89. An information processing method according
to claim 88, further comprising a conversion step,
wherein the performance of conversion at said
10 conversion is permitted at said conversion control
step.

90. An information processing method according
to claim 88, wherein conversion is requested to an
15 external device at said conversion control step.

91. An information processing method according
to claim 90, wherein an object for said conversion is
information described in a language inherent to a
20 specific application or to an output device.

92. An information processing method according
to claim 88, wherein said information that is received
as an object for conversion is either a text document,
25 an image format, a specific printer description
language, or a document description language.

93. A computer-readable storage medium storing a printing program for controlling a computer to perform printing, said program comprising codes for causing said computer to perform:

5 a reception step of receiving information to be printed and a first printing parameter;

 a determination step of employing said information that is received to determine a second parameter suitable for said information;

10 a setup step of setting up said first and said second parameters; and

 a printing step of printing said information based on said first and said second printing parameters set up at said setup step.

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94. A computer-readable storage medium storing a printing program for controlling a computer to perform printing, said program comprising codes for causing said computer to perform:

20 a reception step of receiving information to be printed;

 an identification step of identifying a user for said information that is received;

 a printing step of printing said information;

25 a printing results storage step of storing printing results in one of a plurality of storage locations; and

a control step of storing printing results at a different location for each user who is identified at said identification step.

5 95. A computer-readable storage medium storing a printing program for controlling a computer to perform printing, said program comprising codes for causing said computer to perform:

10 a communication step of communicating with an external device;

 an output step of outputting information; and

 a control step of requesting information from said external device, of receiving said information from said external device, and of permitting said output
15 device to output said information.

 96. A computer-readable storage medium storing a printing program for controlling a computer to perform printing, said program comprising codes for causing
20 said computer to perform:

 a communication step of communicating with an external device;

 an input step of receiving information;

 a processing step of processing said information
25 received at said input step; and

 a control step of transmitting said information to said external device at said communication step and of

requesting said external device to process said information.

5 97. A computer-readable storage medium storing a printing program for controlling a computer to perform printing, said program comprising codes for causing said computer to perform:

an output step of outputting information;

10 an acceptance step of accepting an output instruction, including designation information included for the designation of an output device;

a detection step of detecting an apparatus that is identified in said designation information;

15 an output control step of permitting said output means to execute said output instruction when said apparatus detected at said detection step is a locally own information processing apparatus, and of transmitting said output instruction to an external device when said apparatus detected at said detection
20 step is other than said information processing apparatus.

25 98. A computer-readable storage medium storing a printing program for controlling a computer to perform printing, said program comprising codes for causing said computer to perform:

a processing step of processing information;

a management step of receiving information to be processed from said external device through a communication unit for communicating with said external device, and of managing said information by employing a plurality of management states, including a process pending state and a process wait state; and

a control step of permitting said processing means to process said information.

10 99. A computer-readable storage medium storing a printing program for controlling a computer to perform printing, said program comprising codes for causing said computer to perform:

15 a reception step of receiving a process to be performed by another device;

a processing step of performing a predetermined process required for the performance of said process received at said reception step; and

20 an output step of outputting the results obtained at said processing step.

100. A computer-readable storage medium storing a printing program for controlling a computer to perform printing, said program comprising codes for causing said computer to perform:

25 a reception step of receiving designation information that identifies a target to be processed;

an acquisition step of acquiring said target
identified in said designation information received at
said reception step;

5 a processing step of performing a process for said
target acquired at said acquisition step; and

an output step of outputting the results obtained
at said processing step.

101. A computer-readable storage medium storing a
10 printing program for controlling a computer to perform
printing, said program comprising codes for causing
said computer to perform:

a reception step of receiving information to be
processed;

15 a processing step of processing said information;
and

a conversion control step of controlling a
conversion of said information that is received at said
reception step into information, described using a
20 description language, that is to be processed at said
processing step.